20

25

Docket No. AUS920000752US1

CLAIMS:

What is claimed is:

5 1. A method for reporting failures, comprising: detecting a predetermined number of consecutive correctable errors;

storing a description for each of the predetermined number of correctable errors;

10 determining whether the descriptions for the predetermined number of correctable errors are the same; and

reporting a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.

- 2. The method of claim 1, wherein the step of detecting a predetermined number of correctable errors comprises performing a periodic scan for a processor.
- 3. The method of claim 1, wherein the step of storing a description for each of the predetermined number of correctable errors comprises storing the descriptions in an error data structure.
- 4. The method of claim 3, wherein the error data structure comprises an error table.
- 5. The method of claim 3, further comprising: clearing the error data structure if an

Docket No. AUS920000752US1

uncorrectable error occurs before detecting the predetermined number of consecutive correctable errors.

6. The method of claim 1, wherein the step of reporting a bit line or driver failure comprises: creating an error log; and returning the error log to an operating system.

- 7. The method of claim 1, wherein the predetermined 10 number is five.
 - 8. The method of claim 1, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.

15

- 9. The method of claim 1, further comprising:

 deconfiguring the processor if the descriptions for
 the predetermined number of errors are the same.
- 20 10. The method of claim 9, wherein the step of deconfiguring the processor comprises dynamically deconfiguring the processor.
- 11. The method of claim 9, wherein the step of 25 deconfiguring the processor comprises deconfiguring the processor at boot time.
- 12. The method of claim 1, further comprising:
 replacing the processor if the descriptions for the
 predetermined number of correctable errors are the same.

Docket No. AUS920000752US1

13. An apparatus for reporting failures, comprising: detection means for detecting a predetermined number of consecutive correctable errors;

storage means for storing a description for each of the predetermined number of correctable errors;

determination means for determining whether the descriptions for the predetermined number of correctable errors are the same; and

reporting means for reporting a bit line or driver 10 failure if the descriptions for the predetermined number of correctable errors are the same.

- 14. The apparatus of claim 13, wherein the detection means comprises performing a periodic scan for a processor.
- 15. The apparatus of claim 13, wherein the storage means comprises an error data structure.
- 20 16. The apparatus of claim 15, wherein the error data structure comprises an error table.
- 17. The apparatus of claim 15, further comprising:
 means for clearing the error data structure if an
 uncorrectable error occurs before detecting the
 predetermined number of consecutive correctable errors.
 - 18. The apparatus of claim 13, wherein the reporting means comprises:
- means for creating an error log; and means for returning the error log to an operating

Docket No. AUS920000752US1

system.

19. The apparatus of claim 13, wherein the predetermined number is five.

5

- 20. The apparatus of claim 13, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.
- 10 21. The apparatus of claim 13, further comprising:

 deconfiguration means for deconfiguring the

 processor if the descriptions for the predetermined
 number of errors are the same.
 - 15 22. The apparatus of claim 21, wherein the deconfiguration means comprises means for dynamically deconfiguring the processor.
 - 23. The apparatus of claim 21, wherein the 20 deconfiguration means comprises means for deconfiguring the processor at boot time.
 - 24. The apparatus of claim 13, further comprising: means for replacing the processor if the
 - 25 descriptions for the predetermined number of correctable errors are the same.
 - 25. An apparatus for reporting failures, comprising: a processor; and
 - a memory, coupled to the processor, having stored therein an error data structure,

Docket No. AUS920000752US1

wherein the processor detects a predetermined number of consecutive correctable errors, stores a description for each of the predetermined number of correctable errors in the error data structure, determines whether

- the descriptions for the predetermined number of correctable errors are the same, and reports a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.
- 10 26. The apparatus of claim 25, wherein the processor detects a predetermined number of consecutive correctable errors by performing a periodic scan for the processor.
- 27. The apparatus of claim 25, wherein the error data structure comprises an error table.
 - 28. The apparatus of claim 25, wherein the processor reports a bit line or driver failure by creating an error log, and returning the error log to an operating system.
 - 29. The apparatus of claim 25, wherein the predetermined number is five.
- 30. The apparatus of claim 25, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.
 - 31. A computer program product, in a computer readable medium, for reporting failures, comprising:
- instructions for detecting a predetermined number of consecutive correctable errors;

Docket No. AUS920000752US1

instructions for storing a description for each of the predetermined number of correctable errors;

instructions for determining whether the descriptions for the predetermined number of correctable errors are the same; and

instructions for reporting a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.